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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,829	09/09/2003	Nikolai M. Krivitski	86017.000037	1750
23387 Stephen B. Sala	7590 10/03/200 ai. Esq.	EXAMINER		
Harter, Secrest & Emery LLP			PANI, JOHN	
1600 Bausch & Rochester, NY			ART UNIT	PAPER NUMBER
,			3736	
			MAIL DATE	DELIVERY MODE
		•	10/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

· •		$\mathcal{W}$				
	Application No.	Applicant(s)				
	10/657,829	KRIVITSKI ET AL.				
Office Action Summary	Examiner	Art Unit				
	John Pani	3736				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become AB ANDONEI	l.  lely filed  the mailing date of this communication.  (35 U.S.C. § 133).				
Status		•				
1) Responsive to communication(s) filed on 20 Au	iaust 2007.					
•	action is non-final.					
3) Since this application is in condition for allowan	· · · · · · · · · · · · · · · · · · ·					
Disposition of Claims						
4) Claim(s) 1-18 is/are pending in the application.						
4a) Of the above claim(s) <u>1-4</u> is/are withdrawn from consideration.						
•	5) Claim(s) is/are allowed.					
· <u> </u>	6) Claim(s) <u>5-18</u> is/are rejected.					
7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or	election requirement					
are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) $igotimes$ The drawing(s) filed on <u>09 September 2003</u> is/are: a) $igotimes$ accepted or b) $igodiu$ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form P1O-152.				
Priority under 35 U.S.C. § 119	÷	•				
<ul><li>12) ☐ Acknowledgment is made of a claim for foreign</li><li>a) ☐ All b) ☐ Some * c) ☐ None of:</li></ul>	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents						
3. Copies of the certified copies of the prior		ed in this National Stage				
application from the International Bureau  * See the attached detailed Office action for a list	, , , , , , , , , , , , , , , , , , , ,	d				
See the attached detailed Office action for a list	or the certified copies not receive	u.				
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P					
Paper No(s)/Mail Date <u>12/10/03, 3/09/07</u> .	6) Other:					

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 5-14 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 3,726,269 to Webster ("Webster").
- 3. Webster teaches

## In reference to Claim 5

A catheter (10) comprising: (a) an elongate catheter body (12) having a distal end and a proximal end, the elongate catheter body including an indicator lumen (fluid flow passage 16); and (b) a guide wire (26) extending through a length of the indicator lumen (See Fig. 7).

#### In reference to Claim 6

The catheter of claim 5 (see above), wherein the indicator lumen terminates at the distal end of the elongate catheter body (see col. 5 lines 1-3).

# In reference to Claim 7

The catheter of claim 5 (see above), wherein the indicator lumen has a reduced cross sectional area ("reduced inner diameter", col. 5 lines 1-10) adjacent the distal end of the elongate catheter body.

Art Unit: 3736

## In reference to Claim 8

The catheter of claim 5 (see above), wherein the indicator lumen has a reduced cross sectional area adjacent the distal end of the elongate catheter body ("reduced inner diameter", col. 5 lines 1-10) and the guidewire is sized to be slideably received through the reduced cross sectional area ("permit guidewire **26** to be passed through the catheter").

## In reference to Claim 9

The catheter of claim 5, wherein the indicator lumen has a reduced cross sectional area adjacent the distal end of the elongate catheter body ("reduced inner diameter", col. 5 lines 1-10) and the guidewire is sized to reduce passage of an indicator through the reduced cross sectional area of the indicator lumen (By fitting through the anterior passage of the catheter, the guidewire inherently is sized to reduce passage of an indicator, as this reduces the cross sectional area across which the indicator can flow, and thereby reduces the passage/flow).

#### In reference to Claim 10

The catheter of claim 5 (see above), wherein the indicator lumen terminates adjacent the distal end of the elongate catheter body (inherently, as the lumen allows the guidewire to pass out of it, see Fig. 7).

## In reference to Claim 11

The catheter of claim 5 (see above), wherein the indicator lumen includes a terminal port at the distal end of the elongate catheter body (the distal opening that

Art Unit: 3736

allows passage of guidewire) and a radial injection port (apertures **27**) spaced from the terminal port (see Fig. 7).

## In reference to Claims 12 and 13

The catheter of claim 5 (see above), further comprising a dilution sensor connected to the elongate catheter body, wherein the dilution sensor is a thermistor (dilution thermistor 42, col. 7 lines 14-18, it is connected through 19, which is connected to 23, which is connected to 12, see Figs. 4 and 7).

#### In reference to Claim 14

A method of introducing an indicator through a catheter, the method comprising:

(a) passing a guidewire (26) through an indicator lumen (16) in an elongate catheter body (12, see Fig. 7); and (b) passing the indicator ("coolant medium") through the indicator lumen to pass from the elongate catheter body (see col. 4 lines 1-10).

#### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Webster in view of US Pat. No. 5,782,811 to Samson et al. ("Samson").

Art Unit: 3736

## In reference to Claims 15, 16, 17, and 18

Webster teaches the method of claim 14 (see above), and further teaches that the anterior end of the catheter is restricted so as to force coolant to flow preferentially out of the side apertures rather than from the anterior end (see col. 5 lines 1-45). However, Webster does not expressly disclose simultaneously passing or locating the guidewire and indicator through the indicator lumen, passing the guidewire through a reduced cross sectional area of the indicator lumen to reduce passage of the indicator through the lumen or to increase flow of the indicator through a radial injection port.

Samson (see Fig. 13) teaches of a catheter (530) which uses a guidewire assembly (532) as a means for controlling the fluid flow of diagnostic materials into a selected site (see col. 14 lines 1-11). A number of openings (538) are located radially in the catheter, and the guidewire is used to selectively alter flow through a desired opening.

It would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the method of Webster by passing a guidewire assembly through the reduced diameter anterior end in order to reduce passage of the coolant, as taught by Samson, and motivated by Webster. This would provide the benefit that the flow could be selectively controlled, as taught by Samson. It would have been further obvious to use the guidewire to increase the flow through the radial ports of Webster, as taught by Samson, as this would also increase the user's ability to control flow rates through the side apertures, and Webster discloses the desirability of forcing flow through the radial apertures. This would require the guidewire and indicator both being

Art Unit: 3736

simultaneously passed through the indicator lumen (as Samson teaches moving the guidewire valve portion **34** to vary flow) and located in the indicator lumen.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pani whose telephone number is 571-270-1996.

The examiner can normally be reached on Monday-Friday 7:30 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JP 9/28/07

FOOT FLUXDENBUS

WOOTH PATENT EXAMINER